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15 UNITED STATES DISTRICT COURT
16 NORTHERN DISTRICT OF CALIFORNIA
17 SAN FRANCISCO DIVISION
18

19 AYLUS NETWORKS, INC.,

20 Plaintiff,

21 v.

22 APPLE INC.,

23 Defendant.
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27
28

CASE NO. 3:13-cv-04700-EMC

**DEFENDANT APPLE INC.'S
RESPONSIVE CLAIM CONSTRUCTION
BRIEF**

Date: Nov. 10, 2014

Time: 2:30 p.m.

Place: Courtroom 5, 17th Floor

Judge: Honorable Edward M. Chen

TABLE OF CONTENTS

	<u>Page</u>
I. UNIVERSAL PLUG AND PLAY.....	1
II. OVERVIEW OF U.S. PATENT NO. RE44,412	2
III. PROPER CONSTRUCTIONS OF THE DISPUTED CLAIM TERMS	2
A. “negotiate media content delivery between the MS and the MR” (claims 1, 2, 20, 21 and 27).....	2
B. “resides in the signaling domain” (claims 1, 20, and 27).....	8
C. “cooperate with [network control point/the serving node] CP logic” (claims 1, 20, and 27).....	10
D. “the CP logic ... serves as a [first/second] proxy” (claims 1, 20, and 27).....	11
E. “serving node” (claims 1, 15, 20, 27).....	14
F. “remote from the UE” (claim 15).....	18
G. “wide area network” (claims 1 and 20).....	20
H. “VCR controls” (claim 1).....	20
I. “video play controls” (claims 20 and 27).....	22
J. “handset” (claims 5-6, 13-14, and 33)	23
IV. CONCLUSION	25

TABLE OF AUTHORITIES

Page

CASES

<i>Alloc v. Int'l Trade Comm'n</i> , 342 F.3d 1361 (Fed. Cir. 2003).....	9
<i>Apple Comp., Inc. v. Articulate Sys., Inc.</i> , 234 F.3d 14 (Fed. Cir. 2000).....	10, 25
<i>Bd. of Regents of the Univ. of Texas Sys. v. BENQ Am. Corp.</i> , 533 F.3d 1362 (Fed. Cir. 2008).....	8
<i>Bell Atl. Network Servs. v. Covad Commc'ns Group, Inc.</i> , 262 F.3d 1258 (Fed. Cir. 2001).....	9
<i>Bicon, Inc. v. Straumann Co.</i> , 441 F.3d 945 (Fed. Cir. 2006).....	21
<i>C.R. Bard, Inc. v. U.S. Surgical Corp.</i> , 388 F.3d 858 (Fed. Cir. 2004).....	16
<i>Chicago Bd. Options Exch., Inc. v. Int'l Secs. Exch., LLC</i> , 677 F.3d 1361 (Fed. Cir. 2012).....	21, 23
<i>Chimie v. PPG Indus.</i> , 402 F.3d 1371 (Fed. Cir. 2005).....	8
<i>Decisioning.com, Inc. v. Federated Dept. Stores, Inc.</i> , 527 F.3d 1300 (Fed. Cir. 2008).....	17
<i>Elkay Mfg. Co. v. Ebco Mfg. Co.</i> , 192 F.3d 973 (Fed. Cir. 1999).....	8, 12
<i>Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.</i> , 93 F.3d 1572 (Fed. Cir. 1996).....	22
<i>Hockerson-Halberstadt, Inc. v. Converse Inc.</i> , 183 F.3d 1369 (Fed. Cir. 1999).....	12
<i>Honeywell Int'l, Inc. v. ITT Indus.</i> , 452 F.3d 1312 (Fed. Cir. 2006).....	16
<i>Honeywell Int'l Inc. v. Universal Avionics Sys. Corp.</i> , 488 F.3d 982 (Fed. Cir. 2007).....	14
<i>Innova/Pure Water, Inc. v. Safari Water Filtration Sys.</i> , 381 F.3d 1111 (Fed. Cir. 2004).....	21

TABLE OF AUTHORITIES

(cont'd)

	<u>Page</u>
<i>Irdeto Access, Inc. v. Echostar Satellite Corp.</i> , 383 F.3d 1295 (Fed. Cir. 2004).....	14
<i>Merck & Co. v. Teva Pharms. USA, Inc.</i> , 395 F.3d 1364 (Fed. Cir. 2005).....	21
<i>Microsoft Corp. v. Multi-Tech Sys., Inc.</i> , 357 F.3d 1340 (Fed. Cir. 2004).....	9
<i>O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., Ltd.</i> , 521 F.3d 1351 (Fed. Cir. 2008).....	18
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005) (en banc).....	passim
<i>Pitney Bowes, Inc. v. Hewlett-Packard Co.</i> , 182 F.3d 1298 (Fed. Cir. 1999).....	4
<i>Powell v. Home Depot U.S.A., Inc.</i> , 663 F.3d 1221 (Fed. Cir. 2011).....	4
<i>Rembrandt Data Techs., LP v. AOL, LLC</i> , 641 F.3d 1331 (Fed. Cir. 2011).....	22
<i>Renishaw PLC v. Marposs Societa' per Azioni</i> , 158 F.3d 1243 (Fed. Cir. 1998).....	12, 20
<i>Salazar v. Procter & Gamble Co.</i> , 414 F.3d 1342 (Fed. Cir. 2005).....	12
<i>Schindler Elevator Corp. v. Otis Elevator Co.</i> , 593 F.3d 1275 (Fed. Cir. 2010).....	8
<i>TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc.</i> , 529 F.3d 1364 (Fed. Cir. 2008).....	11
<i>Toshiba Corp. v. Hynix Semiconductor Inc.</i> , No. 3:04-cv-04708-VRW, 2006 WL 2432288 (N.D. Cal. Aug. 21, 2006).....	18, 20, 22
<i>Transclean Corp. v. Bridgewood Servs., Inc.</i> , 290 F.3d 1364 (Fed. Cir. 2002).....	13
<i>U.S. Surgical Corp. v. Ethicon, Inc.</i> , 103 F.3d 1554 (Fed. Cir. 1997).....	17, 18, 20, 23

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TABLE OF AUTHORITIES
(cont'd)

Page

Ultimax Cement Mfg. Corp. v. CTS Cement Mfg. Corp.,
587 F.3d 1339 (Fed. Cir. 2009)..... 12

Wang Labs., Inc. v. Am. Online, Inc.,
197 F.3d 1377 (Fed. Cir. 1999)..... 16

Watts v. XL Sys., Inc.,
232 F.3d 877 (Fed. Cir. 2000)..... 16

Zenon Envtl. v. U.S. Filter Corp.,
506 F.3d 1370 (Fed. Cir. 2007)..... 4

OTHER AUTHORITIES

Patent Local Rule 4-5(a) 1

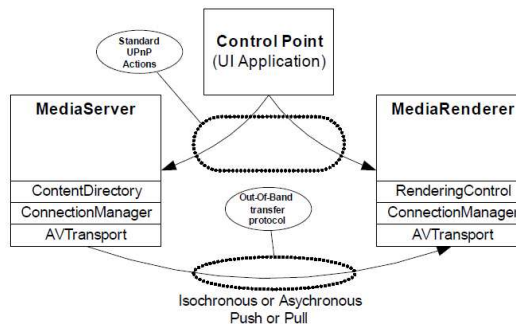
TABLE OF EXHIBITS

Exhibits to the Declaration of Robert Buergi	
1	U.S. Patent No. RE 44,412.
2	Excerpt from the file history of U.S. Patent No. RE44,412 showing the Examiner's "Notice of References Cited."
3	U.S. Patent No. 7,155,305 to Hayes.
4	Excerpt from the file history of U.S. Patent No. 7,724,753 to Naqvi showing the applicant's Aug. 19, 2009 response.
5	Excerpt from the file history of U.S. Patent No. 7,724,753 to Naqvi showing March 25, 2009 Office Action and "Notice of References Cited."
6	Excerpt from the file history of U.S. Patent No. 7,724,753 to Naqvi showing Dictionary.com reference.
7	Excerpt from the file history of U.S. Patent No. 7,724,753 to Naqvi showing claim 1 as originally drafted.
8	Plaintiff Aylus Networks Inc.'s "4-2 Preliminary Claim Constructions And Intrinsic And Extrinsic Evidence" (Patent L.R. 4-2 Disclosures).
9	Excerpts from "Plaintiffs' Disclosure Of Asserted Claims And Preliminary Infringement Contentions Pursuant To Patent L.R. 3.1 And 3.2," dated April 3, 2014.
Exhibits to the Declaration of Sho Kou	
10	UPnP ContentDirectory specification, dated June 25, 2002.
11	UPnP RenderingControl specification, dated June 25, 2002.
12	Resume of Mr. Sho Kou.
13	UPnP AV Architecture specification, dated June 12, 2002.
14	UPnP MediaServer specification, dated June 25, 2002.
15	UPnP MediaRenderer specification, dated June 25, 2002.
16	UPnP ConnectionManager specification, dated June 25, 2002.
17	UPnP AVTransport specification, dated June 25, 2002.
18	Archive.org web page showing an Oct. 7, 2002 capture of a upnp.org web page containing the UPnP specifications referenced above.
Exhibits to the Declaration of Dr. Nathaniel Polish	
19	Resume of Dr. Nathaniel Polish.
20	Excerpts from the IMS specification (3GPP TS 23.228 version 6.15.0 Release 6, IP Multimedia Subsystem (IMS) Stage 2).
21	Gilles Bertrand, "The IP Multimedia Subsystem in Next Generation Networks" (May 30, 2007).

Defendant Apple Inc. (“Apple”) submits this brief in support of its proposed constructions of certain disputed claim terms of U.S. Patent No. RE 44,412 (the “’412 patent”).¹

I. UNIVERSAL PLUG AND PLAY

The claims and specification of the ’412 patent recite devices and terminology taken directly from Universal Plug and Play (“UPnP”). Ex. 1 at 9:58-66, 10:41-44, 16:37-49, 17:7-8, 60-67, Fig. 11.² UPnP is defined by specifications published by the UPnP Forum. *E.g.*, Exs. 10-11, 13-17. UPnP includes an architecture for distributing digital audio and video referred to as the “UPnP AV Architecture.” Ex. 13 (UPnP AV Architecture Specification) at 3. The UPnP AV Architecture employs three devices that form the backbone of the ’412 patent claims, a Control Point (CP), a MediaServer (MS), and a MediaRenderer (MR), as shown below:



Id. at 5; Ex. 1 at 16:37-79. The MS stores media content and the MR renders media content. Ex. 13 at §§ 5.1, 5.2. The CP manages the operation of the MS and MR. The CP obtains from each of the MS and the MR a list of the transfer protocols and data formats supported by that device,

¹ Aylus’s opening brief fails to address five of the ten disputed claim terms selected for briefing. Dkt. No. 47 at 2. Patent Local Rule 4-5(a) provides that Aylus “shall” file “an opening brief and any evidence supporting its claim construction.” Aylus failed to do so as to the five Apple-designated claim terms. Apple objects to this improper tactic as it deprives Apple of an opportunity to submit a brief in response to the arguments concerning these five terms that Aylus apparently intends to make for the first time in its reply brief. The purpose of the briefing schedule provided by the patent local rules (plaintiff’s opening brief, defendant’s responsive brief and plaintiff’s reply brief) is to afford each party the ability to both make its own affirmative arguments and respond to the other party’s arguments. Aylus’s briefing strategy defeats this process as to the five Apple-designated terms. Apple therefore requests that the Court either: (1) strike any portion of Aylus’s reply brief that addresses the five Apple-designated claim terms; or (2) allocate two-thirds of the *Markman* hearing time to Apple to allow Apple to adequately address the arguments made by Aylus concerning the five Apple designated terms.

² Exhibits 1-9 are attached to the Buergi Declaration filed herewith. Exhibits 10-18 are attached to the Kou Declaration. Exhibits 19-21 are attached to the Polish Declaration.

1 selects a matching pair of transfer protocols and data formats (required for the MS and MR to
2 properly function together), and (in the typical case) informs the MS and MR that an
3 outgoing/incoming connection is about to be made using the selected transfer protocol and data
4 format. *Id.* at 9-11 (steps 3-5). The CP then specifies the address of the content to be transferred
5 and controls the flow of the media using commands to the MS and/or MR, such as “Play,” “Stop”
6 and “Seek.” *Id.* at 9-11 (steps 6-7). *See also* Kou Decl. at ¶¶ 15-18; Polish Decl. at ¶¶ 17-18.

7 **II. OVERVIEW OF U.S. PATENT NO. RE44,412**

8 The '412 patent describes the UPnP AV Architecture and an extension of that architecture
9 that introduces a “control point proxy” (CPP). Ex. 1 at 16:33-36, 17:60-63, Figs. 11-12. The
10 patent claims recite that the CPP cooperates with a CP to negotiate delivery of media content
11 between a MS and a MR. *Id.* at 24:46-51, 25:58-62, 26:47-52. In the embodiment of Figure 12,
12 the CP negotiates with the MS and the CPP negotiates with the MR. *Id.* at Fig. 12. The CP may
13 be located in a wide area network instead of a user’s premises, while the CPP may be located in
14 the user’s premises, which allows content provided by a MS located outside the home to be
15 displayed on a MR in the home. *Id.* at 5:37-46, 17:12-32, 61-63, Fig. 12. This architecture
16 purportedly minimizes use of “expensive” cellular networks as the CP may communicate with the
17 MS over a wide area (wired) network and the CPP may communicate with the MR using a
18 personal area network, such as Wi-Fi. *Id.* at 17:4-19, 45-47, 60-64. *See also* Kou Decl. at ¶¶ 19-
19 22; Polish Decl. at ¶¶ 19-20.

20 **III. PROPER CONSTRUCTIONS OF THE DISPUTED CLAIM TERMS**

21 **A. “negotiate media content delivery between the MS and the MR” (claims 1, 2,** 22 **20, 21 and 27)**

23 Apple’s Proposed Construction	Aylus’s Proposed Construction
24 Compare transfer protocols and content formats 25 supported by each of the MS and MR to select a 26 transfer protocol and content format supported by both, and instruct the MS and MR to transfer media content between them using the selected transfer protocol and data format.	Plain and ordinary meaning. Alternative construction: Coordinate transport of audiovisual content from the MS to the MR.

27 Each of the patent’s three independent claims recites that the CP logic and CPP logic

1 cooperate to “negotiate media content delivery between the MS and MR.” Ex. 1 at 24:49-51
2 (claim 1), 25:60-62 (claim 20), 26:51-53 (claim 27); *see also id.* at Fig. 12. This limitation had a
3 known meaning to one of ordinary skill in the art at the time of the ’412 patent filing, namely
4 Apple’s proposed construction. This is established by both the testimony of those of at least
5 ordinary skill in the art at the time of the patent, and the UPnP specifications from which the
6 claimed invention is derived, and is confirmed by the teaching of the ’412 patent specification.

7 The claimed CP, MS and MR are UPnP AV Architecture features. This undeniable fact is
8 plainly stated by the ’412 patent specification. Ex. 1 at 16:37-39 (“[The] UPnP architecture
9 includes three functional entities: control point (CP), media server (MS), and media renderer
10 (MR).”); Kou Decl. at ¶ 15; Polish Decl. at ¶ 17. In this regard, the architecture depicted in
11 Figure 11 of the ’412 patent, which depicts the CP, MS and MR, is plainly derived from a figure
12 in the UPnP AV Architecture. *Compare* Ex. 1 at Fig. 11 *with* Ex. 13 at 5, Fig. 3; *see also* Kou
13 Decl. at ¶¶ 19-20. The patent specification further plainly states that the aspect of the invention
14 that ultimately was recited in the claims is the “extension” of the UPnP architecture into a wide
15 area network. Ex. 1 at 17:7-8, 60-61. Persons of skill in the art in fact understand that the alleged
16 invention of the ’412 patent is an extension of the UPnP Architecture. Kou Decl. at ¶¶ 21-22;
17 Polish Decl. at ¶ 19. Aylus’s opening brief does not dispute any of this, and in fact appears to
18 concede most (if not all) of this. Aylus Op. Br. at 2-3.

19 Because the foundation of the invention described and claimed in the ’412 patent is the
20 UPnP Architecture, and because one of ordinary skill in the art would read the ’412 patent claims
21 and specification knowing that to be the case, one of ordinary skill in the art naturally would read
22 and understand this claim limitation in light of the UPnP Architecture. Kou Decl. at ¶¶ 7, 19-22,
23 27; *see also* Polish Decl. at ¶¶ 11, 19-20, 23. In this regard, the relevant UPnP standard
24 specifications are dated in June 2002 and were available to the public at least as early as October
25 2002, long before the filing of the ’412 patent’s parent applications in 2005. Ex. 13 at 1; Ex. 14
26 at 1; Ex. 15 at 1; Ex. 16 at 1; Ex. 17 at 1; Ex. 18 (UPnP Forum web page from Oct. 7, 2002
27 showing availability of Exs. 13-17); Kou Decl. at ¶ 14. This is important because “the court
28 looks to those sources available to the public that show what a person of skill in the art would

1 have understood disputed claim language to mean.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314
2 (Fed. Cir. 2005) (en banc). The foundational UPnP specifications are thus of central importance
3 to the correct construction of this claim limitation.

4 The UPnP standard specifications have even greater importance because they also are
5 intrinsic evidence. *Phillips*, 415 F.3d at 1317 (“we have emphasized the importance of intrinsic
6 evidence in claim construction”). In this regard, “prior art cited in a patent or cited in the
7 prosecution history of the patent constitutes intrinsic evidence.” *Powell v. Home Depot U.S.A.,*
8 *Inc.*, 663 F.3d 1221, 1231 (Fed. Cir. 2011). Here, during prosecution of the patent, the Examiner
9 cited U.S. Patent No. 7,155,305 to Hayes (“Hayes”). Ex. 2 (Examiner’s “Notice of References
10 Cited”) at 1; Ex. 1 at 2 (listing Hayes as a reference cited by the Examiner). Hayes incorporates
11 by reference the relevant UPnP specifications in their entirety. Ex. 3 at 3:7-11 (“the UPnP ...
12 specifications which can be found at the upnp.org Web site ... are incorporated herein by
13 reference in their entirety”). This incorporation by reference makes the UPnP specifications part
14 of Hayes just “as if [they] were explicitly contained therein.” *Zenon Envtl. v. U.S. Filter Corp.*,
15 506 F.3d 1370, 1378 (Fed. Cir. 2007). The UPnP specifications are therefore intrinsic evidence.

16 Moreover, even if Aylus were to incorrectly argue that the UPnP specifications are instead
17 extrinsic evidence, they are nonetheless highly instructive, both because (1) as established above,
18 one of ordinary skill in the art would have in fact read the ’412 patent through the prism of the
19 UPnP specifications, and (2) the UPnP specifications are trustworthy evidence that the Court can
20 rely upon in ensuring that the technical limitations of the ’412 patent are construed in a manner
21 consistent with how they would have been read at the time of the patent. *Pitney Bowes, Inc. v.*
22 *Hewlett-Packard Co.*, 182 F.3d 1298, 1309 (Fed. Cir. 1999) (“it is entirely appropriate, perhaps
23 even preferable, for a court to consult trustworthy extrinsic evidence to ensure that the claim
24 construction it is tending to from the patent file is not inconsistent with ... the pertinent technical
25 field. This is especially the case with respect to technical terms”); *see also Phillips*, 415 F.3d
26 at 1314. The UPnP specifications are particularly reliable and instructive here because:

- 27 • Each of the claims uses key terminology lifted directly from the UPnP specifications,
28 such as “control point” (CP), “media server” (MS) and “media renderer” (MR) Ex. 1

at claims 1, 20, 27; Ex. 13 at § 5; Kou Decl. at ¶ 7; Polish Decl. at ¶ 23.

- The patent specification expressly and repeatedly refers to “the industry standard Universal Plug and Play (UPnP) framework,” the “UPnP architecture,” “the Universal Plug and Play (UPnP) protocol,” “universal Plug and Play Devices (UPnP),” and “UPnP” – and in fact does so at least 31 times. Ex. 1 at 16:37-42, 17:7-9, 17:60-65, 18:51-54, Figs. 14, 15, 16, 17; *see also id.* at 6:37-39, 9:60-66, 10:4-5, 10:41-44, 20:26, 20:37, 21:5, 21:9, 21:17-20, 21:23-27, 21:39-43, 21:45, 21:48-52, 22:49-56, 23:4-14, 23:27-31. The patent specification thus clearly assumes that those reading the patent know of and are familiar with the UPnP Architecture.
- The patent specification refers to the function “PrepareForConnection(),” which the patent specification does not define but which the UPnP specifications do define. Ex. 1 at Fig. 15 (element 1512) and Fig. 17 (element 1709); Ex. 16 (UPnP ConnectionManager Specification) at 8-9. This further evidences the intent of the drafters of the patent that those reading the patent would know to turn to the UPnP specifications as definitional sources.
- As established above, Figure 11 of the patent depicts the UPnP AV Architecture (*compare* Ex. 1 at Fig. 11 *with* Ex. 13 at 4-5), and Figure 12 of the patent depicts an extension of the UPnP AV Architecture. Ex. 1 at 17:7-12.
- The patent specification never discusses negotiating media content delivery outside the context of UPnP.
- Aylus has not, and cannot, cite any evidence that defines “negotiate media content delivery between the MS and the MR” differently than the UPnP specifications.

Regardless of whether it is classified as intrinsic evidence or highly instructive extrinsic evidence, the UPnP AV Architecture specification explains that the CP negotiates media content delivery between the MS and MR by first obtaining from the MS “the transfer protocols and data formats that the MediaServer supports to transfer the content.” Ex. 13 at 9 (step 2); Kou Decl. at ¶ 16; Polish Decl. at ¶ 18. Example transfer protocols are IEEE-1394, HTTP GET, and RTSP/RTP, and example data formats are MPEG2, MPEG4, MP3, WMA, and JPEG. Ex. 14

1 (UPnP MediaServer Specification) at 7. The CP then obtains from the MR “a list of transfer
2 protocols and data formats supported by the MediaRenderer.” Ex. 13 at 9 (step 3); Kou Decl. at ¶
3 16; Polish Decl. at ¶ 18. Then, as is set forth in Apple’s proposed claim construction, the
4 supported transfer protocols and data formats are compared and “a transfer protocol and data
5 format that are supported by both the MediaServer and MediaRenderer” is selected. Ex. 13 at 9
6 (step 4); Kou Decl. at ¶ 16; Polish Decl. at ¶ 18. Steps 5 and 6 then describe, as is set forth in
7 Apple’s claim construction, instructing the MS and MR to transfer media content between them
8 using the selected transfer protocol and data format. Specifically, step 5 describes instructing the
9 MS and MR to use the selected transfer protocol and data format for a connection about to be
10 made between them (Ex. 13 at 9), and step 6 describes informing the MS or MR of the URI of the
11 content item that needs to be transferred, which URI also includes the selected transfer protocol
12 and data format, *e.g.*, “rtsp://example.com/video/ birthday.m2v”. Ex. 13 at 9; Ex. 17 at 62
13 (emphasis added); Kou Decl. at ¶¶ 16, 18; Polish Decl. at ¶ 18. In short, (1) the UPnP
14 specification explains what it means to “negotiate media content delivery between the MS and
15 MR,” (2) that meaning is set forth in Apple’s proposed construction, and (3) as established above,
16 one of ordinary skill in the art reading this claim language understands it to refer to the typical
17 negotiation of media content delivery between the MS and MR in the UPnP specifications. Kou
18 Decl. at ¶¶ 26-28.

19 Significantly, the selection of an appropriate transfer protocol and data format (steps 2-4)
20 is necessary because “MediaServers may support one or multiple transfer protocols and data
21 formats” and “[t]he type of content that a MediaRenderer can receive depends on the transfer
22 protocols and data formats that it supports.” Ex. 13 at 5-6; Kou Decl. at ¶¶ 17, 28. “Some
23 MediaRenderers may only support one type of content (e.g. audio or still images), whereas other
24 MediaRenderers may support a wide variety of content including video, audio, [and] still
25 images.” Ex. 13 at 6. Only Apple’s construction properly defines the negotiation of media
26 content delivery between the MS and the MR to include these necessary – and understood – steps
27 of selecting a transfer protocol and data format supported by both the MS and MR (“compare
28 transfer protocols and content formats supported by each of the MS and MR to select a transfer

1 protocol and content format supported by both”).

2 The patent’s discussion of negotiation of media content delivery is consistent with the
3 negotiation described by the UPnP standard. For example, the patent states: “[T]he CP negotiates
4 multimedia content delivery with the MS and instructs the MS to deliver content to an address
5 corresponding to the MR on the UE. The instructions provided during such mediation will
6 conform to the environment, context, and capabilities of the [MR on the] UE.” Ex. 1 at 13:64-
7 14:2, 14:5-7 (emphasis added). In other words, if the MR is capable of displaying only MPEG2
8 video, the instructions provided during negotiation will be to deliver and receive video in MPEG2
9 format. Similarly, the patent states that the media server may be “a home stereo or DVD player”
10 and that the media renderer may be “a TV Display or the display on a handset.” *Id.* at 5:44-46.
11 In order to deliver and play content between any of these varying types of MSs and MRs, the
12 negotiation of the media content delivery must necessarily ensure that the transport protocol and
13 data format used are supported by both devices. Kou Decl. at ¶¶ 17, 28. Only Apple’s
14 construction properly reflects these consistent teachings of the patent specification and the UPnP
15 standard.

16 Apple’s proposed construction also is directly supported by other parts of the
17 specification. For example, Figure 11 of the patent specification identifies a CP that
18 communicates with a MS and MR to “negotiate transport” of “media delivery.” The specification
19 states, with respect to Figure 11, that “CP 1016 ... negotiates media rendering with the MR
20 [t]hat is, the CP effectively instructs the MR to start expecting content from the MS, and to
21 present such.” Ex. 1 at 14:2-5. Similarly, and again with respect to Figure 11, the specification
22 states that a CP “instructs the [media] server to initiate sending media to the [MR] ... and
23 instructs the MR ... to render the incoming media. (See FIG. 11.)” *Id.* at 16:14-17. Accordingly,
24 the specification describes the negotiation of media content delivery as including at least
25 instructions to the MS and MR to transfer media content between them, as reflected by only
26 Apple’s construction (“instruct the MS and MR to transfer media content between them”).

27 Aylus’s construction, by contrast, ignores (1) the understanding of those of ordinary skill
28 in the art, (2) all of the above-referenced teachings of the patent specification and (3) the

foundational and well-understood UPnP specifications. Aylus’s construction also should be rejected because Aylus attempts to replace the claim term “negotiate” with the word “coordinate.” However, the patent specification never uses the word “coordinate,” and Aylus has not otherwise explained what would justify changing the meaning of the claim. Apple’s construction, by contrast, explains what the claimed negotiation means to one of ordinary skill in the art.

B. “resides in the signaling domain” (claims 1, 20, and 27)

Apple’s Proposed Construction	Aylus’s Proposed Construction
Is involved only in commands and instructions and never receives any media content.	Plain and ordinary meaning. Alternative construction: Operates in the signaling domain.

Apple’s construction of “resides in the signaling domain” is required by a clear prosecution disclaimer made by Aylus during the prosecution of U.S. Patent No. 7,724,753 (the “’753 patent”), which the PTO subsequently reissued as the ’412 patent. Because the ’412 patent is a child of the ’753 patent, the ’753 patent prosecution history applies “with equal force” to the ’412 patent. *Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 980 (Fed. Cir. 1999).

“[T]he prosecution history can often inform the meaning of the claim language by demonstrating how ... the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Phillips*, 415 F.3d at 1317. In this regard, “[b]y distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover.” *Bd. of Regents of the Univ. of Texas Sys. v. BENQ Am. Corp.*, 533 F.3d 1362, 1373 (Fed. Cir. 2008). As a result, a patent owner “is not entitled to any interpretation that is disclaimed during prosecution.” *Schindler Elevator Corp. v. Otis Elevator Co.*, 593 F.3d 1275, 1285 (Fed. Cir. 2010). “Such a use of the prosecution history ensures that claims are not construed one way in order to obtain their allowance and in a different way against accused infringers,” and “protects the public’s reliance on definitive statements made during prosecution.” *Bd. of Regents*, 533 F.3d at 1373; *Chimie v. PPG Indus.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005).

During the prosecution of the ’753 patent, the Examiner rejected all pending claims based on a combination of certain prior art references with U.S. Patent Pub. No. 2004/0107143 (“Niemi”), which the Examiner found disclosed “control point (CP) logic.” Ex. 5 (Mar. 25, 2009

Office Action) at 4-5, 12. To overcome the cited prior art, Aylus amended the claims to recite that the CP logic “resides in the signaling domain” and argued to the Examiner that “[t]he claimed CP ... is only in the ‘signaling’ domain,” “is involved only in commands and instructions,” and “never actually receives any content”:

3. The **CP, as claimed, does not act as the conventional proxy** disclosed in the cited references, because the claimed CP never actually receives any content. The claimed CP is involved only in commands and instructions and is not in the media path, i.e., it is only in the “signaling” domain and not the “bearer” domain. In Niemi (and other conventional embodiments) the proxy is in the bearer path.

Ex. 4 (Applicant’s Aug. 19, 2009 Response) at 2, 7-8. The Examiner then allowed the application to issue as the ’753 patent, which the PTO reissued as the ’412 patent. Aylus therefore expressly defined what it means for the CP to reside in the signaling domain in order to overcome the prior art and secure allowance of the claims.

Aylus’s statements to the Examiner are a crystal clear, unmistakable disavowal of claim scope. *See, e.g., Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1349 (Fed. Cir. 2004) (limiting the term “transmitting” because the patentee stated during prosecution that the invention transmits over a standard telephone line, thus disclaiming transmission over a packet-switched network); *Alloc v. Int’l Trade Comm’n*, 342 F.3d 1361, 1372 (Fed. Cir. 2003) (finding the patentee expressly disavowed floor paneling systems without “play” because the applicant cited the feature during prosecution to overcome prior art); *Bell Atl. Network Servs. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1273 (Fed. Cir. 2001) (limiting operation of the “transceiver” to the three stated modes because of limiting statements made by the patentee to try to overcome a prior art rejection). Accordingly, Aylus is estopped from now attempting to recapture the claim scope it previously expressly disavowed, namely any CP that (1) is involved in anything other than commands and instructions or (2) actually receives content.

Aylus’s prosecution disclaimer also is consistent with the patent’s claims, which recite CP logic to “negotiate media content delivery between the MS and the MR” – thus, the claims recite content flowing between the MS and MR and not through the CP logic. Ex. 1 at 24:49-51, 26:8-

1 10, 26:50-52 (emphasis added). Aylus’s disclaimer is likewise consistent with the patent
2 specification, which shows the “Media Delivery” that is negotiated by a CP flowing from the
3 Media Server (MS) to the Media Renderer (MR) without passing through the CP. *Id.* at Figs. 11,
4 12, 13:64-67.

5 Aylus’s construction, by contrast, wholly ignores Aylus’s prior express disclaimer made
6 to the PTO to overcome the prior art and obtain its patent, and in doing so improperly attempts to
7 recapture claim scope that it previously surrendered to secure the claims.

8 **C. “cooperate with [network control point/the serving node] CP logic” (claims 1,**
9 **20, and 27)**

Apple’s Proposed Construction	Aylus’s Proposed Construction
The CPP logic communicates with one of the MS and MR, and the CP logic communicates with the other of the MS and MR.	Plain and ordinary meaning. Alternative construction: Work with CP logic to coordinate transport of audiovisual content from the MS to the MR.

13 The claims themselves recite “cooperation” for the express purpose of the CPP logic and
14 the CP logic negotiating media content delivery between the MS and the MR. Ex. 1 at 24:49-51,
15 25:60-62, 26:50-52. The specification teaches that this required cooperation comprises the CP
16 logic negotiating media content delivery with the MS, and the CPP logic negotiating media
17 content delivery with the MR. Ex. 1 at Fig. 12 (showing that the CP “negotiate[s] transport” with
18 the MS and the CPP “negotiate[s] transport” with the MR), 17:12-13 (“communication between
19 CP 1016 and MS 1102”), 17:14-17 (“CPP 1202 ... communicate[s] with the MR [1104]”), 17:45-
20 47 (“communication between CP 1016 and MS 1102, or between CPP 1202 and MR 1104”),
21 18:9-10 (“the CP-MR negotiation [of Fig. 11] is transformed into CPP-MR negotiation [of Fig.
22 12]”). Only Apple’s construction reflects the specification’s express teaching that CPP logic
23 communicates with one of the MS or MR, and the CP logic communicates with the other of the
24 MS or MR, to cooperatively negotiate media content delivery.

25 Moreover, claims must be interpreted in light of the “purpose of the invention” described
26 in the specification. *Apple Comp., Inc. v. Articulate Sys., Inc.*, 234 F.3d 14, 25 (Fed. Cir. 2000).
27 The patent specification explains that using CP logic and CPP logic to cooperatively negotiate
28 media content delivery “afford[s] considerable cost savings” by minimizing use of the expensive

1 “wide area wireless network” (i.e., the cellular network). Ex. 1 at 17:17-19. The specification
2 teaches that such expensive spectrum use is reduced by having the CP logic communicate with
3 the MS in order to use a non-cellular network between them, such as a wired wide area network,
4 and having the CPP logic communicate with the MR in order to use a non-cellular network
5 between them, such as a Wi-Fi network. *Id.* at 17:7-17. Again, only Apple’s construction reflects
6 this stated purpose of the alleged invention.

7 The specification does disclose certain embodiments in which the CPP logic (or CP logic)
8 communicate with both the MS and MR. However, such embodiments are not claimed in the
9 patent because the specification teaches that such embodiments do not involve the claimed CP
10 logic (or CPP logic) in the negotiation of media content delivery, as is required by the claims.
11 Ex. 1 at 17:50-59 (“In this case there is no need to involve the CP”). Specifically, because the
12 claims expressly recite that both the CP logic and the CPP logic cooperate to negotiate media
13 content delivery, and because this does not occur in these embodiments, these embodiments are
14 not claimed and therefore cannot influence the construction of the “cooperate” limitation. *TIP*
15 *Sys., LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1375 (Fed. Cir. 2008) (claims
16 should not be construed to encompass all disclosed embodiments when the claim language is
17 limited to certain embodiments).

18 Aylus’s construction should be rejected because it ignores the foregoing claim
19 requirements, the specification’s teachings, and the stated purpose of the alleged invention.
20 Moreover, there is no basis in the patent for Aylus’s proposed simplistic replacement of the
21 claimed “cooperation” – which, as established above, is given meaning through the teaching of
22 the specification – with the nebulous non-technical phrase “work with.”

23 **D. “the CP logic ... serves as a [first/second] proxy” (claims 1, 20, and 27)**

Apple’s Proposed Construction	Aylus’s Proposed Construction
The CP logic accepts control messages from the CPP and passes them on to the MS or MR.	Plain and ordinary meaning. Alternative construction: The control point logic acts as an authorized actor.

27 Apple’s construction of this claim term is based on a simple application of the Examiner’s
28 construction of “proxy” to the claims. Statements made by Examiners during a patent’s

1 prosecution history are intrinsic evidence, which a court should consider in construing claim
2 terms. *Phillips*, 415 F.3d at 1317; *see also Salazar v. Procter & Gamble Co.*, 414 F.3d 1342,
3 1347 (Fed. Cir. 2005) (“Statements about a claim term made by an examiner during prosecution
4 of an application may be evidence of how one of skill in the art understood the term at the time
5 the application was filed.”). In this regard, as established above, the prosecution history of the
6 parent ’753 patent applies “with equal force” to the ’412 patent. *Elkay Mfg.*, 192 F.3d at 980.

7 During the prosecution of the ’753 patent, the Examiner explained that “the accepted
8 meaning of a ‘proxy’ is ‘A process that accepts requests for some service and passes them on to
9 the real server.’” Ex. 5 (Mar. 25, 2009 Office Action) at 3-4. The Examiner obtained this
10 definition from “The Free On-line Dictionary of Computing,” as reported by Dictionary.com. *See*
11 *id.* at 16 (Examiner’s “Notice of References Cited”); Ex. 6 (Dictionary.com reference from the
12 ’753 file history) at 4-5. Aylus never challenged the Examiner’s definition of “proxy,” which
13 forms the basis of Apple’s proposed claim construction. Because the patent specification does
14 not itself provide a definition of “proxy” or otherwise contradict the Examiner’s definition, it is
15 appropriate to employ the Examiner’s definition of “proxy” for purposes of claim construction.
16 *Phillips*, 415 F.3d at 1317; *Salazar*, 414 F.3d at 1347.

17 Moreover, claim terms must be construed in the context of the claim as a whole. *Ultimax*
18 *Cement Mfg. Corp. v. CTS Cement Mfg. Corp.*, 587 F.3d 1339, 1347 (Fed. Cir. 2009) (a claim
19 term must be construed in “the context in which the term was used within the claim”);
20 *Hockerson-Halberstadt, Inc. v. Converse Inc.*, 183 F.3d 1369, 1374 (Fed. Cir. 1999) (“[P]roper
21 claim construction ... demands interpretation of the entire claim in context, not a single element in
22 isolation.”). In addition, “[t]he claim construction inquiry ... begins and ends in all cases with the
23 actual words of the claim.” *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1248
24 (Fed. Cir. 1998). Here, Apple’s construction reflects the Examiner’s construction of “proxy” in
25 the context of the patent’s claim language. Specifically, each of the patent’s claims recites that
26 the CP logic “serves as a ... proxy.” Ex. 1 at 24:44-45, 26:3-4, 26:40-41. It is therefore the CP
27 logic that must accept requests and pass them on to the real server. Likewise, each claim recites
28 that the CP logic “negotiate[s] media content delivery with at least one of the MS and MR” or

1 “... with at least one of a media server (MS) and a media renderer (MR).” *Id.* at 24:41-43,
2 25:67-26:2, 26:36-39. Thus, the CP logic must pass requests on to the MS or the MR.

3 Each claim also recites that the CP logic “cooperate[s]” with the “control point proxy”
4 (CPP) logic to negotiate such media content delivery, where the CPP logic resides in the “user
5 endpoint (UE).” *Id.* at 24:49-51, 25:60-62, 26:51-53. In this regard, the patent specification
6 explains that “[a] subscriber requests a media service to be rendered on a home ... display
7 device.” *Id.* at 17:42-43. The service request “emanates from the UE,” which contains CPP 1202
8 that “communicates with CP 1016 via internal interface 1204.” *Id.* at 16:1-2, 16:35-36, 17:42-44,
9 Fig. 12. This request “is forwarded... to the CP.” *Id.* at 16:1-2. Accordingly, as is reflected in
10 Apple’s proposed construction, the CP logic receives the requests from the CPP logic.

11 Finally, because each claim recites that the CP logic and CPP logic are cooperating to
12 negotiate media content delivery between the MS and MR, the “service requests” of the
13 Examiner’s “proxy” definition are best characterized as control messages, because the CP and
14 CPP use control messages to perform such negotiation. *Id.* at 17:3-6 (disclosing negotiating
15 media content delivery between the MS and MR using “control messages between the CP and the
16 MS, and the CP and the MR”) (emphasis added).

17 Aylus’s construction should be rejected for at least several reasons. First, Aylus’s
18 definition of “proxy” as “an authorized actor” is different than the Examiner’s definition of
19 “proxy,” discussed above. Notably, Aylus did not challenge the Examiner’s definition of “proxy”
20 during prosecution history, and should not be heard to do so now.

21 Second, Aylus’s “authorized actor” definition apparently is taken from non-technical
22 dictionaries, such as The American Heritage New Dictionary of Cultural Literacy and
23 Investopedia.com, which are far less relevant to this patent than the technical, computing
24 dictionary from which the Examiner obtained his definition of “proxy.” Ex. 6 (dictionary
25 excerpts from the ’753 file history) at 3-4; *Transclean Corp. v. Bridgewood Servs., Inc.*, 290 F.3d
26 1364, 1375 (Fed. Cir. 2002). Indeed, the non-technical dictionaries define “proxy” primarily in
27 the context of shareholder voting, which has no relevance to this patent. Ex. 6 at 1-3.

28 Third, neither the claim language nor its specification ever refers to an “authorized actor.”

1 Finally, even accepting Aylus’s improper “authorized actor” definition of “proxy,” Aylus’s
2 construction sheds no light on what it means for the CP logic to be an “authorized actor.” For
3 example, Aylus does not explain for what claim element the CP logic is authorized to act upon or
4 for what purpose. Thus, Aylus’s construction would offer no meaningful guidance to the jury as
5 to the requirements of the claims.

6 **E. “serving node” (claims 1, 15, 20, 27)**

7

Apple’s Proposed Construction	Aylus’s Proposed Construction
A node configured to establish an IMS session with the UE.	Plain and ordinary meaning. Alternative construction: A serving element in the wide area network.

8
9

10 “The specification is always highly relevant to the claim construction analysis. ... [I]t is
11 the single best guide to the meaning of a disputed term.” *Phillips*, 415 F.3d at 1315; *Honeywell*
12 *Int’l Inc. v. Universal Avionics Sys. Corp.*, 488 F.3d 982, 991 (Fed. Cir. 2007) (“Without a
13 customary meaning of a term within the art, the specification usually supplies the best context for
14 deciphering claim meaning.”). Here, the claim term “serving node” did not have a generally
15 accepted meaning to those of ordinary skill in the art at the time of the patent’s filing. Polish
16 Decl. at ¶ 23. Indeed, while Aylus has identified eight different technical dictionary definitions as
17 evidence of the meaning of “node,” Aylus has not provided a single definition for the term
18 “serving node.” Dkt. No. 47 at 15-17. The meaning of this term should therefore be derived
19 from the patent specification. *Honeywell*, 488 F. 3d 991; *see also Irdeto Access, Inc. v. Echostar*
20 *Satellite Corp.*, 383 F.3d 1295, 1300 (Fed. Cir. 2004).

21 As one of ordinary skill in the art would recognize in coming to understand the term, the
22 specification consistently describes the “serving node” as a node configured to generate an IMS
23 session with the UE. Polish Decl. at ¶¶ 22-30. For example, the specification states:

- 24
- 25 • “In one scenario, a subscriber wanting to view multimedia content from an Internet server
26 on his handset initiates an IMS request to **serving node** 408. This request then causes a
connection to be made to the **serving node** 408... and an IMS session is established
between **serving node** 408 and the UE ...” Ex. 1 at 12:11-22 (emphasis added).
 - 27 • “The following case illustrates a session that involves the PA client discovering an
28 associated device via UPnP Discovery mechanisms, and the **serving node** triggering a

1 handoff procedure from the PA client to the associated device to initiate a real time
2 streaming protocol (RTSP) streaming session. In this example, an IMS/SIP session has
3 been established between the PA and the Media Server Control AS in the **serving**
4 **node.**” *Id.* at 21:48-55 (emphasis added).³

- 5 • “In this example, the PA acts as a SIP UE and an IMS/SIP session has been established
6 between the PA and the Media Server Control AS in the **serving node.**” *Id.* at 22:60-62
7 (emphasis added).
- 8 • “It is assumed that the PA is acting as a SIP UE and that an IMS/SIP session has been
9 established between the PA and the Media Server Control AS in the **serving node.**” *Id.* at
10 23:52-54 (emphasis added).

11 Likewise, the patent’s figures consistently depict the “serving node” as a node configured
12 to establish an IMS session. For instance, Figure 14 depicts the serving node establishing an IMS
13 session with the UE as the first step of the process. Ex. 1 at Fig. 14 (depicting arrow labeled
14 “IMS Session Established” between the serving node and UE); *see also id.* at Figs. 15-16 (same).

15 Further, each of the patent’s independent claims requires that the serving node be
16 provisioned with CP logic (Ex. 1 at 24:40-41, 25:66-67, 26:35-37), which the specification
17 describes as operating in the context of an IMS session. For example, the specification states:

- 18 • “The control point (CP) 1016, referred to earlier, is the mechanism used to allow ‘out of
19 band’ media transport under control of IMS.” Ex. 1 at 15:55-57 (emphasis added).
- 20 • “Now consider a UE requesting Mobile TV service. This request emanates from the UE
21 (on an ICL) and is forwarded by the S-CSCF to the CP 1016 acting as an AS (in standard
22 IMS fashion).” *Id.* at 16:1-4 (emphasis added).

23 Indeed, the specification explains that the invention involves “a wide area networking extension
24 of UPnP, involving moving the CP into a network element, such as the serving node of an IMS
25 session” *Id.* at 17:60-63; *see also id.* at 6:63-65 (describing Figs. 11 and 12 as showing an
26 architecture in “an IMS context.”). Importantly, nowhere does the specification contemplate a
27 serving node without the capability of establishing an IMS session.

28 To the extent that Aylus argues that Apple’s construction imports limitations into the
claim from the specification, such arguments are without merit because the patent’s use of IMS is

³ The personal agent (PA) is part of the UE. Ex. 1 at 10:19-21.

1 not merely a preferred embodiment, but instead is described as part of the invention itself.
2 “When the ‘preferred embodiment’ is described as the invention itself, the claims are not entitled
3 to a broader scope than that embodiment.” *Wang Labs., Inc. v. Am. Online, Inc.*, 197 F.3d 1377,
4 1383 (Fed. Cir. 1999); *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000) (“the
5 specification actually limits the invention to structures that utilize misaligned taper angles, stating
6 that, ‘[t]he present invention utilizes [the varying taper angle] feature’”); *Honeywell Int’l, Inc. v.*
7 *ITT Indus.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006) (concluding that the invention was limited to a
8 fuel filter because the specification referred to the fuel filter as “this invention” and “the present
9 invention,” and in such cases “[t]he public is entitled to take the patentee at his word.”).

10 Here, the patent specification’s “Field of Invention” section explains that “[t]he invention
11 generally relates to IP Multimedia Subsystem (IMS) networks and, more specifically, to IMS
12 users that use (perhaps multiple) discovered user endpoint devices.” Ex. 1 at 1:35-37 (emphasis
13 added). Similarly, in its “Summary of the Invention,” the specification states that “the invention
14 features a method of controlling and delivering media content from a media server (MS) to a
15 media renderer (MR) utilizing a wide area IMS network for control.” *Id.* at 5:49-53 (emphasis
16 added); *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 864 (Fed. Cir. 2004) (finding
17 statements in the “Summary of the Invention” section of a specification particularly probative).
18 Because the patent specification not once, but twice, describes “the invention” as involving IMS,
19 the “serving node” limitation is not entitled to a broader scope.

20 Similarly, Apple’s construction does not seek to read a limitation into the claim that was
21 removed during prosecution. Claim 1 as originally drafted explicitly recited a “wide area IMS
22 network” and a “serving node in the IMS network.” Ex. 7 (excerpt of Mar. 8, 2006 Application)
23 at 37. The Examiner objected to the claim, in part, because the acronym “IMS” was not spelled
24 out. Ex. 5 (March 25, 2009 Rejection) at 3. In response, Aylus amended the claim to remove
25 “IMS.” Nevertheless, the presence of “IMS” in the original claims confirms that the invention
26 contemplated an IMS environment. Furthermore, Apple’s construction addresses only what the
27 serving node is, not the type of network in which it resides. Apple’s construction thus allows for
28 the serving node to reside in any type of network, consistent with Aylus’s amendment.

1 The Federal Circuit’s holding in *Decisioning.com, Inc. v. Federated Dept. Stores, Inc.*,
2 527 F.3d 1300 (Fed. Cir. 2008) is instructive in this regard. During prosecution, the patentee
3 removed the limitation “kiosk” from the claims at issue. *Id.* at 1309. The patentee argued that the
4 term “remote interface” should therefore not be limited to kiosks, but rather interpreted broadly to
5 encompass any computer system. *Id.* at 1307. The Federal Circuit disagreed, holding that
6 although the claims were no longer limited to a remote interface in a kiosk housing, the remote
7 interface must nonetheless be a kiosk (*i.e.*, a system located in a public space), because the
8 specification described the use of a kiosk as the “present invention” and consistently described
9 the remote interface of the invention as being located in a public location. *Id.* at 1310-11. Here,
10 because the patent specification describes “the invention” as being in an IMS environment and
11 consistently uses the term “serving node” to refer to a node configured to establish IMS sessions,
12 Apple’s proposed construction is correct. *Id.*

13 Aylus’s construction should be rejected because it (1) incorrectly replaces the term “node”
14 with “element” and (2) otherwise unhelpfully parrots the words of the claim. In this regard,
15 Aylus does not explain why the technical term “node” should be broadened into the unbounded
16 term “element.” Indeed, through this overly broad proposed construction, Aylus improperly
17 seeks to expand the scope of the claims beyond what it actually invented. Nor does Aylus’s
18 inclusion of the phrase “in a wide area network” justify its construction, because the claim
19 language itself requires a “serving node in the wide area network.” Ex. 1 at 24:40, 25:66. Thus,
20 this aspect of Aylus’s proposed construction is merely redundant of the claim language, and
21 should be rejected on that basis. *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed.
22 Cir. 1997) (“Claim construction is a matter of resolution of disputed meanings and technical
23 scope, to clarify and when necessary to explain what the patentee covered by the claims It is
24 not an obligatory exercise in redundancy.”).

1 **F. “remote from the UE” (claim 15)**

2

Apple’s Proposed Construction	Aylus’s Proposed Construction
3 Plain and ordinary meaning.	4 Not located on the same electronic communication network that connects devices in a small geographic area as the UE.

5 “[D]istrict courts are not ... required to construe every limitation present in a patent’s
6 asserted claims.” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1362
7 (Fed. Cir. 2008); *U.S. Surgical Corp.*, 103 F.3d at 1568 (claim construction is appropriate to
8 “clarify and when necessary to explain what the patentee covered by the claims” but is not an
9 “obligatory exercise in redundancy”). A claim term does not require construction where it is
10 “sufficiently clear” and “superior to the proposed construction.” *Toshiba Corp. v. Hynix*
11 *Semiconductor Inc.*, No. 3:04-cv-04708-VRW, 2006 WL 2432288 at *5 (N.D. Cal. Aug. 21,
12 2006).

13 The claim term “remote from the UE” does not warrant construction because the actual
14 claim language is sufficiently clear and is superior to Aylus’s construction. In particular,
15 “remote” is a familiar and commonplace word that is used in everyday language, and the parties
16 do not dispute the meaning of “UE.”

17 Moreover, Aylus’s proposed construction also is flawed and thus should be rejected on
18 that basis as well. First, the middle part of Aylus’s construction (i.e., “electronic communication
19 network that connects devices in a small geographic area”) originally was Aylus’s construction
20 for the phrase “local area network.” Ex. 8 (Aylus’s Patent L.R. 4-2 Disclosures) at Ex. A at 3.
21 But “local area network” is not a phrase that appears in any of the patent’s claims. Upon Apple’s
22 advising Aylus of this, Aylus withdrew “local area network” as a term proposed for construction,
23 but also changed its construction of “remote from the UE” to include its prior construction of the
24 non-existent claim term “local area network,” resulting in its current construction of “remote from
25 the UE.” *See id.* at Ex. A at 8 (Aylus’s original construction of “remote from the UE”).
26 However, Aylus is no more entitled to inject the meaning of “local area network” into a claim that
27 does not recite a local area network than it was to initially propose “local area network” for
28 construction in the first place. Indeed, as is readily apparent from the foregoing chronology,

1 Aylus’s construction of “remote from the UE” appears to be more an exercise of trying to jam its
2 construction somewhere (anywhere) into the claims, than it is a meaningful attempt to provide a
3 sound construction of the actual claim term.

4 Second, Aylus’s construction requires that the UE reside on a network spanning a “small
5 geographic area,” which Aylus contends in its opening brief is a “local area network.” Aylus Op.
6 Br. at 21. But nothing in the language of claim 15 or its parent claim 1 requires the UE to reside
7 on a local area network. To the contrary, claim 1 recites “if one of the MS and MR are not in
8 communication with the UE via a local wireless network,” which suggests that the UE may in fact
9 not reside on a local network. Ex. 1 at 24:60-61 (emphasis added). Indeed, claim 1 recites “the
10 UE of the wide area network,” which is the same “wide area network” on which the “serving
11 node” with the CP logic resides. *Id.* at 24:40-41, 46. Thus, far from requiring that the UE be
12 located on a local area network (or, as Aylus’s construction words it, a “network that connects
13 devices in a small geographic area”), the claim provides that the UE is on a wide area network.

14 Third, a UE may be remote from other devices regardless of whether it is (or is not)
15 located on a local area network. For example, two cellular phones that are located across the
16 country from each other are remote from each other even if they are communicating with each
17 other across a nationwide cellular network. Thus, it is not the case, as Aylus posits, that the UE
18 must be on a local area network in order to be remote from the MS or MR.

19 Fourth, Aylus’s opening brief is certainly correct in noting that other language in claim 1
20 requires that the CP logic, MS and MR “are not stored on the physical device that is the user
21 endpoint.” Aylus Op. Br. at 21. However, there is no logic to Aylus’ conclusion that this
22 requirement somehow also means that the UE is required by claim 15 to be on a local area
23 network. There simply is no such requirement in claim 15.

24 Finally, Aylus’s proposed construction introduces substantial vagueness into the scope of
25 the claim term because there is no objective measure of whether a network’s geographic area is
26 “small” enough to fall within Aylus’s construction. For example, it is unclear whether networks
27 spanning an office park, a college campus, or a small town would fall within Aylus’s
28 construction. For all these reasons, the Court should reject Aylus’s proposed construction.

1 **G. “wide area network” (claims 1 and 20)**

2

Apple’s Proposed Construction	Aylus’s Proposed Construction
Plain and ordinary meaning.	An electronic communication network that connects nodes in a large geographical area.

3

4 The claim term “wide area network” does not warrant construction because the language
5 is sufficiently clear and is superior to Aylus’s construction. *Toshiba Corp.*, 2006 WL 2432288 at
6 *5. Given the ubiquity of the Internet and nationwide cellular networks (e.g., those provided by
7 AT&T or Verizon), all of which are wide area networks, the concept of a “wide area network” is
8 readily understandable to a juror.

9 Moreover, Aylus’s construction is largely redundant of the claim language and provides
10 no additional clarity about the term’s scope. In this regard, Aylus’s construction repeats two of
11 three words in the claim term (“network” and “area”), making it at least somewhat redundant to
12 the actual claim language, which is disfavored. *U.S. Surgical Corp.*, 103 F.3d at 1568. Aylus’s
13 construction also effectively replaces the claim term “wide” with the words “large geographical.”
14 But this vague term provides no additional assistance to a juror in determining whether a given
15 network qualifies as a “wide area network” because there is no objective measure of what makes
16 a network “large” enough to fall within Aylus’s construction. For example, it is unclear whether
17 networks spanning a college campus, a town, a city, or a metropolitan region would fall within
18 Aylus’s construction. This lack of clarity is evidenced by the assertion in Aylus’s opening brief
19 that a wide area network is “everything” that is not a “local area network,” which itself is not a
20 defined term. For all these reasons, the Court should reject Aylus’s proposed construction.

21 **H. “VCR controls” (claim 1)**

22

Apple’s Proposed Construction	Aylus’s Proposed Construction
Controls for a video cassette recorder (VCR).	Controls for display of video content (e.g., play, pause, rewind, stop buttons).

23

24 “The claim construction inquiry ... begins and ends in all cases with the actual words of
25 the claim.” *Renishaw PLC*, 158 F.3d at 1248. Claim 1 expressly recites “video cassette recorder
26 (VCR) controls,” confirming that Apple’s construction is correct because Apple’s construction
27 defines the recited controls as being controls for a video cassette recorder. Ex. 1 at 24:51
28

1 (emphasis added). The claim language could not be any more clear in this regard.

2 Moreover, a claim construction analysis should assume that “different [claim] terms
3 convey different meanings.” *Chicago Bd. Options Exch., Inc. v. Int’l Secs. Exch., LLC*, 677 F.3d
4 1361, 1371 (Fed. Cir. 2012); *Innova/Pure Water, Inc. v. Safari Water Filtration Sys.*, 381 F.3d
5 1111, 1119 (Fed. Cir. 2004) (when an applicant uses different claim terms, one may “infer that he
6 intended his choice of different terms to reflect a differentiation in the meaning of those terms”).
7 Here, independent claims 20 and 27 do not recite “VCR controls,” and instead recite “video play
8 controls” without reference to a video cassette recorder. Claims 20 and 27 therefore confirm that
9 the “VCR controls” of claim 1 are not simply any video play controls, but are instead controls for
10 a video cassette recorder. Aylus’s proposed constructions violate this well-established claim
11 construction maxim by proposing identical constructions for “VCR controls” (claim 1) and
12 “video play controls” (claims 20 and 27).

13 Similarly, “claims are interpreted with an eye toward giving effect to all terms in the
14 claim.” *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006); *Merck & Co. v. Teva*
15 *Pharms. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) (“A claim construction that gives
16 meaning to all the terms of the claim is preferred over one that does not do so”). The construction
17 of “VCR controls” must therefore give meaning to the term “VCR,” which the claim itself recites
18 is a “video cassette recorder.” Ex. 1 at 24:51. Apple’s construction does so, while Aylus’s
19 construction improperly writes the term “VCR” completely out of the claim.

20 Aylus’s criticisms of Apple’s construction are without merit. Aylus Op. Br. at 13-16.
21 First, Apple’s construction does not require that the UE (which claims 5 and 13 recite may be
22 implemented on a “handset” or reside in a “remote control device”) be a VCR. Instead, as claim
23 1 recites, the VCR controls, not the VCR itself, are “on the UE.” Ex. 1 at 24:63. For example, a
24 remote control UE may include controls for a VCR, among other devices, consistent with Apple’s
25 construction, and those controls may be used as recited in the claims and as described in the
26 specification. In this regard, footnote 1 of Aylus’s opening brief is incorrect in asserting that
27 Apple’s construction is ambiguous. Aylus Op. Br. at 12. Apple’s construction plainly describes
28 (or is intended to plainly describe) controls that control a video cassette recorder (VCR), not, as

1 Aylus surmises, the “controls included in a video cassette recorder.” Thus, Aylus’s primary
2 criticism of Apple’s construction – that the construction somehow requires the UE to be a VCR –
3 is without merit.

4 Aylus’s repeated assertion that Apple’s construction would render the claims “inoperable”
5 (Aylus Op. Br. at 13-15) is wrong for the same reason, as that assertion is premised upon the false
6 assumption that Apple’s construction requires the VCR controls to be part of a VCR. *Id.*

7 Aylus’s observation that the claimed “VCR controls” may be on user endpoints such as
8 handsets and remote controls (Aylus Op. Br. at 14-15) likewise misses the mark. As explained
9 above, the VCR controls on a handset or a remote control – which, as the claim language itself
10 plainly requires, can be used as “video cassette recorder (VCR) controls” – also may be used by
11 the UE to control the presentation of content provided by the MS and rendered by the MR.

12 Aylus’s proposed construction must be rejected both because it fails to give meaning to
13 the claim term “VCR” and the claim’s recitation of “video cassette recorder (VCR) controls” –
14 and in fact effectively writes that language entirely out of the claims – but also because Aylus is
15 asking the Court to adopt the same construction for the term “VCR controls” of claim 1 that
16 Aylus proposes for the different claim term “video play controls” of claims 20 and 27. In so
17 doing, Aylus is effectively asking the Court to redraft claim 1 to conform to claims 20 and 27.
18 But the Federal Circuit “repeatedly and consistently has recognized that courts may not redraft
19 claims.” *See, e.g., Rembrandt Data Techs., LP v. AOL, LLC*, 641 F.3d 1331, 1339 (Fed. Cir.
20 2011). Instead, the patentee “must live with the language it chose.” *Ethicon Endo-Surgery, Inc.*
21 *v. U.S. Surgical Corp.*, 93 F.3d 1572, 1583 (Fed. Cir. 1996). Aylus’s proposed construction must
22 therefore be rejected.

23 **I. “video play controls” (claims 20 and 27)**

Apple’s Proposed Construction	Aylus’s Proposed Construction
Plain and ordinary meaning.	Controls for display of video content (e.g., play, pause, rewind, stop buttons).

26 A claim term does not require construction where it is sufficiently clear and superior to the
27 proposed constructions. *Toshiba Corp.*, 2006 WL 2432288 at *5. The claim term “video play
28

controls” is sufficiently clear because it is non-technical and uses familiar and commonplace words that are used in everyday language. Moreover, Aylus’s argument that the Court should construe this term in order to prevent Apple from later arguing that “video play controls” relate to controls for a VCR (Aylus Op. Br. at 17:7-9) lacks merit because, as established above, Apple’s position is that the term “video play controls” must have a different meaning than “VCR controls,” which should be construed as controls for controlling a VCR.

Furthermore, the claim language is superior to Aylus’s proposed construction for several reasons. First, Aylus’s construction of “video play controls” repeats the terms “video,” “play,” and “controls,” and therefore is a disfavored exercise in redundancy. *U.S. Surgical Corp.*, 103 F.3d at 1568. Second, it is assumed that “different [claim] terms convey different meanings.” *Chicago Bd.*, 677 F.3d at 1371. Yet, Aylus offers the same construction for both “video play controls” and the different claim term “VCR controls,” in violation of this maxim. The Court should therefore reject Aylus’s proposed construction.

J. “handset” (claims 5-6, 13-14, and 33)

Apple’s Proposed Construction	Aylus’s Proposed Construction
A mobile phone capable of making and receiving calls over the Public Switched Telephone Network.	A wireless handheld communication device that supports radio access technology (e.g., Wi-Fi, GSM, CDMA).

The primary dispute between the parties is whether the claimed “handset” must be capable of making and receiving phone calls (as Apple contends), or whether it may be virtually any type of wireless device, even one that cannot make or receive phone calls (as Aylus incorrectly contends).

Claim terms “are generally given their ordinary and customary meaning.” *Phillips*, 415 F.3d at 1312. The ordinary and customary meaning of a claim term is the meaning that the term had to a person of ordinary skill in the art at the time of the invention. *Id.* at 1313. Here, the term “handset” did in fact have a well-understood meaning to one of ordinary skill in the art at the time of the invention, as one skilled in the art at the time of the alleged invention understood “handset” to refer to a mobile device that can make and receive phone calls. Polish Decl. at ¶¶ 31-32. In this regard, the term “handset” has been associated with telephony for decades. *Id.*

1 The specification uses the term “handset” in accordance with this plain meaning. For
2 example, the specification states: “[a]s the bandwidth provided by wireless networks increases, it
3 is now possible to send and receive multimedia information to handsets. Thus, handsets are no
4 longer used only to make and receive telephone calls.” Ex. 1 at 4:60-63 (emphasis added). In
5 other words, while handsets may now perform various additional functions, the handset’s
6 defining characteristic is to make and receive calls. The specification further explains that
7 typically mobile handsets are connected (via intermediary components) to the “Public Switched
8 Telephone Network,” which enables them to make and receive phone calls. *Id.* at 1:45-51; Polish
9 Decl. at ¶ 35.

10 Nowhere does the specification contemplate a handset without the ability to make and
11 receive phone calls, and Aylus cites no such example. Indeed, Aylus quotes two passages from
12 the specification describing “Class A” and “Class B” handsets, but the specification makes clear
13 that both classes of handsets make and receive phone calls. Aylus Op. Br. at 11-12; Ex. 1 at 15:4-
14 45 (listing four possible scenarios for Class A and Class B handsets, each involving a “voice
15 call”); Polish Decl. at ¶ 33.

16 Aylus’s own opening brief, in discussing the background of the ’412 patent, confirms that
17 it was understood at the time of the patent that a “handset” made phone calls. Specifically, in
18 describing the prior art that Aylus allegedly was attempting to improve upon, Aylus describes the
19 early smartphone handsets of the time as “integrating PDAs with wireless phones to create what
20 we now call smartphones.” Aylus Op. Br. at 3. Aylus notes that these “[h]andsets also had small
21 screens and poor screen resolution, and were therefore poor display devices.” *Id.*

22 Aylus’s primary criticism of Apple’s construction relates to the phrase “Public Switched
23 Telephone Network.” Aylus Op. Br. at 7-11. But the Public Switched Telephone Network
24 simply is the standard infrastructure for making and receiving phone calls. Polish Decl. at ¶ 35.

25 Aylus’s proposed construction, by contrast, ignores the plain meaning of the term and its
26 use in the specification. Aylus contends its construction must be correct because the claims and
27 specification describe capabilities of a handset other than making and receiving phone calls.
28 Aylus Op. Br. at 9-12. But the mere fact that a handset may have capabilities in addition to

1 making and receiving phone calls does not somehow negate the fact that one of ordinary skill in
2 the art at the time of the patent understood that a “handset” made and received phone calls. The
3 specification itself acknowledges as much. Ex. 1 at 4:60-63 (“handsets are no longer used only to
4 make and receive telephone calls”) (emphasis added).

5 Aylus’s proposed construction also impermissibly conflicts with one of the stated
6 purposes of the alleged invention. *Apple Comp., Inc. v. Articulate Sys., Inc.*, 234 F.3d 14, 25
7 (Fed. Cir. 2000) (“[T]he claim must be interpreted in light of the teachings of the written
8 description and purpose of the invention described therein.”) (emphasis added). The specification
9 states that because a handset “has an inherent disadvantage since its form factor is generally not
10 suitable for long term use as a display device” due to the “small size of the handset display
11 screen,” one goal of the invention is to provide multimedia services on a larger LCD or TV
12 screen. Ex. 1 at 5:15-19 (emphasis added). But Aylus’s construction simply requires that a
13 “handset” be “handheld,” which Aylus believes encompasses devices with much larger screens,
14 such as tablet computers. Ex. 9 (Aylus’s Infringement Contentions) at 2 (accusing Apple’s iPad
15 tablets of infringement). Because Aylus’s construction conflicts with a stated purpose of the
16 alleged invention, it should be rejected. *Apple*, 234 F.3d at 25. For all these reasons, the Court
17 should adopt Apple’s construction rather than Aylus’s proposed construction.

18 **IV. CONCLUSION**

19 Apple respectfully requests that the Court adopt Apple’s proposed constructions of the
20 disputed claim terms.

21
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23 By: /s/ Mark D. Fowler

24 Mark D. Fowler

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